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GAILLARDIAS.



MARCH, 1887.

TREES FOR SMALL PLACES, city and village lots, are often desired, and because the habits of trees are not well known by the owners of such places, they are apt to plant varieties which afterwards are found to be unsuitable.

Let us here pass in review those kinds for this purpose that may be planted most generally throughout the country, that are of desirable size and shape, and that also possess other pleasing and ornamental features. In noticing the following kinds of deciduous trees they are placed in a somewhat orderly form, inexact though it be, to show their adaptability by reason of hardiness, those admitting of the widest distribution being mentioned first, and the others relatively in rotation.

The Mountain Ash is of low growth, forms a compact and rather regularly formed head, with handsome, pinnate leaves; bears white flowers in May, which are succeeded by clusters of scarlet fruits that remain on after the leaves have fallen and long into the winter. The American species, *Pyrus Americana*, is found in our woods and thickets from Canada to Georgia, and westward to the Mississippi, and beyond, and everywhere in this wide region is quite hardy, bearing the severest weather uninjured. It usually grows from fifteen to twenty feet in height.

The European Mountain Ash, *Pyrus aucuparia*, is somewhat more erect in growth, with smaller leaflets, and its fruits are of a brighter, deeper color. Its general appearance is rather more pleasing than our own native species, and it is, consequently, more frequently planted. A variety of this last species known as the Oak-leaved Mountain Ash, has leaflets bearing a general resemblance to those of the Oak; it grows twenty feet and upwards in height, and has a handsome, compact head, producing flowers and fruits like the others. It is a particularly pleasing and satisfactory tree, and is equally as hardy as the others.

The Cut-leaved Weeping Birch has been so much planted in this country during the last twenty-five years that few ornamental trees are now better known than this. It has been too much planted, and we would advise avoiding it in localities where it is already prevalent. Notwithstanding the excellent points which this tree possesses, yet they are so marked that they make it objectionably conspicuous when too frequently planted, as sometimes seen on a small area. The white bark of this Birch makes it the most noticeable object in the landscape. The outline of the tree is narrowly pyramidal; the branches and twigs are numerous, of gracefully drooping habit, with light, elegant foliage. In planting it is

very frequently associated with the Purple-leaved Birch, and the contrast in their colors is very agreeable. Both are hardy, handsome trees, so handsome that they should be used sparingly, else their beauty is depreciated.

The Fern-leaved Beech is one of the handsomest of lawn trees. It should be allowed to branch near, or close to, the ground, and it forms a compact, roundish or oval head. The dark green leaves are deeply cut, giving them a most graceful form. It is quite hardy and can be very generally planted.

Most of the Maples grow too rapidly and attain too large a size to be employed for the purpose now under consideration. However, there is one form of it, as yet but little known, which, with proper treatment, may be used; this is Wier's Cut-leaved Silver Maple. It is a rapid growing tree, making shoots that gracefully droop after the manner of the Weeping Birch. The leaves are of a beautiful form, being deeply cut into narrow lobes, and gray or silvery white on the under side. The tree bears cutting well, being very vigorous, and when the head becomes too large the branches can be shortened back, so keeping it of moderate size. If a tree is wanted for a dense shade, we know of none better than the Norway Maple, with its broad, dark green, glossy leaves. It is a rather slow-growing tree, and for fifteen or twenty years will not become too large on a good sized village lot; in time it will make a very high and wide-spreading head, and if planted on a small place it should be in view of cutting it out before it occupies too much space.

The Judas Tree, *Cercis Canadensis*, is a native of the Middle and Western States. It makes a low, spreading head, has handsome large, heart-shaped leaves, and in April or May bears a great profusion of pea-shaped flowers, of pink or peach-blossom color, making it a particularly handsome object at this season, though always appearing well. It grows about twenty feet high.

The Flowering Thorns are among the most highly prized of small lawn trees. They grow only from ten to fifteen feet in height, are compact and erect, but branching so as to form a good head, and late in spring cover themselves with blossoms. The foliage is handsome and

abundant, and the trees at all times appear to good advantage. The most highly prized of the Thorns are the common Hawthorn and its varieties, especially the Double White, the Double Scarlet and the Double Red. These varieties planted together in a clump make a brilliant show in their blooming season. Another fine variety of the same species is the Parsley-leaved Thorn, the leaves being finely cut and crimped, giving it a novel appearance; the flowers are white, single.

Whoever has seen a fine specimen of the Cock-spur Thorn in bloom, as it grows in our thickets and fence corners, has had a sight to delight the eye. A variety of this species is cultivated, having narrow, bright green, glossy leaves, superior to those of the wild tree, and blooming as freely, being literally covered with its single white flowers in its season; this is the *Pyracantha*-leaved Thorn. Another variety of the same is called the Glossy-leaved Thorn. The flowers of all are pleasingly fragrant.

The Purple-leaved Plum, *Prunus Pisardi*, is as yet but little disseminated, but it is an ornamental tree of superior value. The foliage is dark purple, and that of the tips of the young shoots a lively crimson. The tree is of vigorous habit, attaining the size of the ordinary Plum tree, and bearing a fruit of fair quality. It is one of the most beautiful of the dark-leaved trees, and should be better known.

The White Fringe Tree, *Chionanthus Virginica*, is a handsome, low-growing tree, with broad, glossy leaves, and bears in May and June a profusion of pure white flowers, having narrow, drooping petals that present the appearance of fringe. This is an uncommonly fine small tree, and has been but little planted.

The Sweet Gum, or Liquidamber, is a tree of medium size and rather slow growth. The leaves are star-shaped, dark, glossy green, changing in autumn to a deep purplish crimson; a very beautiful tree, and not yet widely known.

The Maiden-hair Tree, so called from the resemblance of its leaves to the leaves of the Maiden-hair Fern, is a Japanese tree of moderate growth, though in some locations it will become quite large. The specimens we are most familiar with are only fifteen to eighteen feet high after twenty-five or thirty years' growth in

good soil. The foliage of this tree is very admirable, and in autumn changes to a clear lemon yellow. In trade catalogues the Maiden-hair Tree is usually mentioned as *Salisburia adiantifolia*, and its most modern botanical name is *Ginkgo biloba*.

Our space will not admit of mentioning in detail the hardy varieties of *Magnolia*, all of which are handsome, low-growing trees, with fine foliage, and bearing large, beautiful and fragrant flowers in spring and summer. They are admirable lawn trees planted singly or in groups, and can be employed to advantage on small places. There is some difficulty in removing these trees if their roots are much exposed; they should be taken up carefully, with some soil attached to the roots, if possible, which should then be carefully protected by sacking until finally transplanted. Such care makes the cost of these trees greater than many others, but a *Magnolia* in successful growth on the lawn is a tree that cannot be too highly valued.

The Laburnum, or *Cytisus Laburnum*, though usually classed as a flowering shrub, will become in time a tree of

twenty-five feet or more in height; there are such specimens in this locality.

All of the above named varieties are hardy in this locality, and many of them much farther north; the last is a little tender, having the tips of its shoots injured occasionally. There are other kinds that are entitled to a place in this list, but our readers can confidently take those named and plant them with assurance of success, if they are properly cared for, and the result will be far more pleasing than the planting of common varieties of Maples and Elms, as is usually done.

In addition, we may mention a few of the more hardy, reliable coniferous evergreen trees; the White Spruce, the Norway Spruce, and the Colorado Blue Spruce, are all excellent and hardy, suitable for large places when fully grown, and for small ones for twelve or fifteen years. When these trees are planted on small grounds it should be done in view of cutting them out when they become too large.

The Hemlock, the Irish Juniper, and the Siberian *Arbor Vitæ* are all hardy, small-sized evergreens of fine appearance.

EARLY WORK IN THE GARDEN.

The extreme variability of the weather during the past three months apparently warrants the inference that there will be opportunity to do some early spring work, even if settled weather does not arrive sooner than usual. It is essential to get in some crops early, and the Onion is one of the most important. No time should be lost at the first opportunity presented, to make full preparation and sow the seed. Once in, even if frost follows, it is safe. If the soil has been manured with well rotted stable manure and plowed in the fall, it can the more surely be prepared early in spring by several draggings. If guano, or other commercial fertilizer, is to be used it should be sowed broadcast and dragged in. In connection with a good manuring of stable manure plowed in it would also be advisable to give a dressing of nitrate of soda, about three or four hundred pounds to the acre. This dressing can be given as soon as the plants begin to appear above ground, and immediately before using the cultivator the first time, and it

will then be worked into the soil exactly when the plants are ready to appropriate it, and thus there will be the least loss. the effect of this top-dressing will be to push the plants along rapidly early in the season, thus enabling them to commence forming bulbs before the hottest weather comes on, which is a matter of great importance in order to secure a good crop. The great value of nitrate of soda, a material our cultivators are only beginning to learn the value of, is to hasten the growth of plants early in the season, and for this purpose it has no equal.

Market growers of Peas cannot be too active in getting in the earliest varieties of this popular vegetable; a few days difference in time will often make considerable difference in the profits of this crop. In every family garden a good supply of the early Peas should be put in at the first opportunity. There is nothing more welcome than green Peas when they first come to the table, and at that time there is a general scarcity of culinary vegetables.

FREESIA.

Another season's experience with Freesia bulbs has given us great satisfaction, and we can say to our readers that the Freesia is a plant that can be had to

the engraving at about half size; the bulb at the left is about natural size.

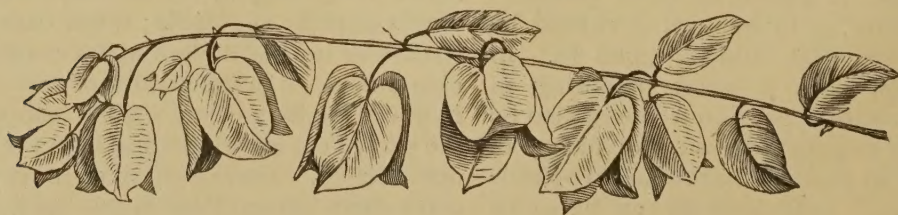
A soil composed of loam, leaf-mold and well decayed manure, and a little sand, such as is commonly used in potting, is suitable; half a dozen bulbs can be set in a four-inch pot, filling the soil about them to their tips, or just to cover them. Give water, and set them in a cool place in the greenhouse, conservatory or window. They do not need much heat, a temperature of 55° being plenty. They should be near the glass, and not be kept too close, but having air given frequently in favorable weather. About ten degrees more of heat can be allowed as the blossoming season approaches.

By potting the bulbs about the middle of September, they can be brought into bloom for the Christmas holidays. Some of the stems have three heads of flowers, with eight to ten single blossoms on each. The lowest flowers open first and bloom successively to the tip, a pot of plants thus showing flowers for nearly a fortnight. A continuous supply of the flowers can be kept up through the winter by potting a few at intervals of two weeks all through the autumn. A stem on which the flowers have begun or are about to open, can be cut and placed in water in a cool place, and the flowers will open as well and as regularly as if remaining on the plant. After blooming the water can be gradually decreased, and the bulbs allowed to ripen, when it should be entirely stopped. The bulbs increase more than double every year. During the resting stage there is no better way to keep them than to leave them in the pots where they have bloomed, keeping them quite dry, for if they are moistened they will commence to grow.



FREESIA.

bloom in any window with the least care. It is a plant for everybody. The flowers are pure white with the exception of an orange yellow spot at the base of each of the lower divisions; they are very graceful in form, and with a rich and abundant fragrance. They are shown in



AFTERMATH.

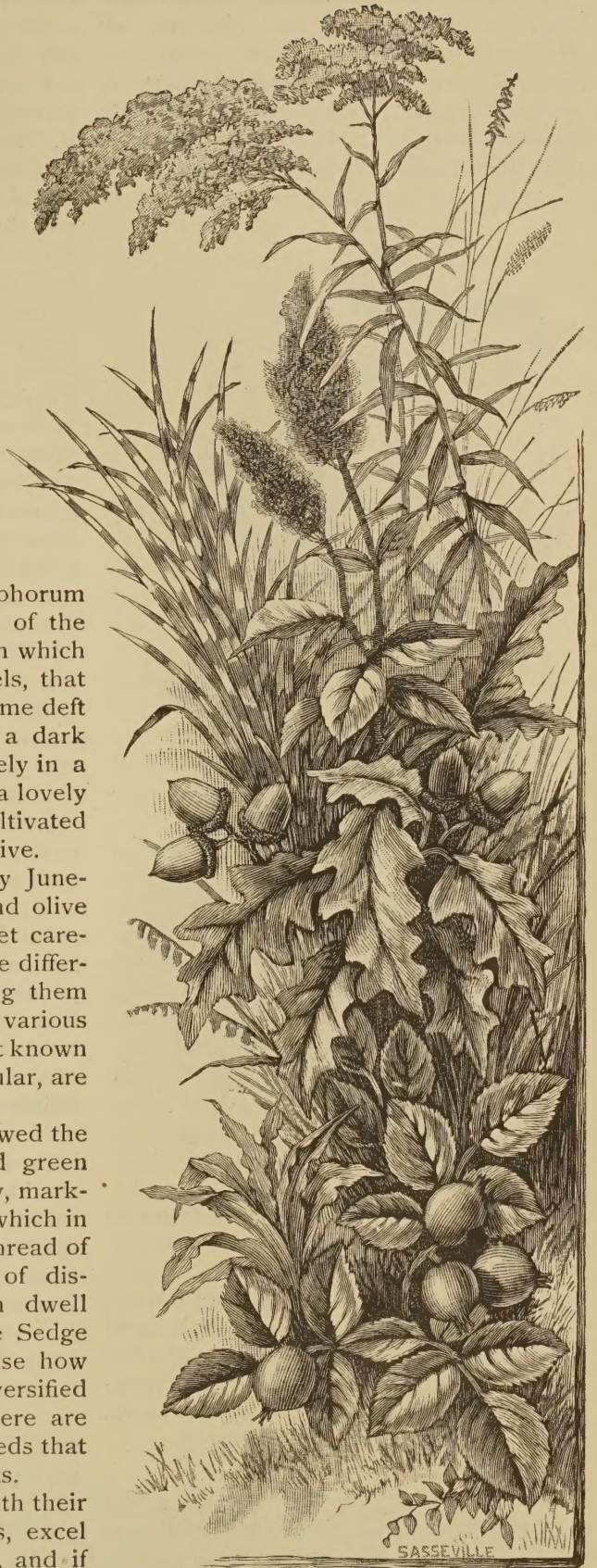
Aftermath is usually associated with autumn, with "melancholy days," with waning hopes that have, perhaps, briefly brightened. But the thrifty gatherer of aftermath begins to harvest early in the season.

There was no premonition of decay when the first crop was secured; but, instead, every promise of summer's luxuriance. The *Cypripediums* were in bud, and dozens of dainty wood flowers in bloom, and just a little way off a spotted sandpiper peered out with distressed, anxious eyes from the tangle of grass which concealed its nest. Following its artful and misleading course, the discovery was made of a large bed of Cotton grass, of the variety *Eriophorum gracile*, one of the most graceful of the sedges. The slender stalks, from which droop several dainty white tassels, that look to be made from silk by some deft hand, if gathered and hung in a dark place to dry, or better, put loosely in a large vase, make the beginning of a lovely winter bouquet. There is no cultivated grass nearly so delicate and effective.

Just about this time the feathery June-grass begins to show its purple and olive bloom, and should be cut and set carelessly in a large jar to cure. The different varieties of Bent-grass, among them Herd's-grass or Red-top, and various sorts of Drop-grass, especially that known as "Nimble Will," in the vernacular, are pretty and useful.

If, just before haying, you followed the wonderfully curved line of vivid green that wound through the meadow, marking the course of a tiny brook, which in dry times dwindled to a mere thread of moisture, you made a voyage of discovery. For, on either margin dwell some charming members of the Sedge family, and it is a matter of surprise how large the number is and how diversified in form. Later in the season there are many of the taller sedges and reeds that are exceedingly pretty in bouquets.

The blossoms of sowed corn, with their delicate mauve and brown tints, excel many of the grasses in beauty, and if dried without being crowded preserve their symmetry. Of course, the garden



affords much aftermath. There are the panicles of the *Gypsophila*, the charming oval seed-pods of the *Lunaria*, or *Honesty*, with their silvery sheen and graceful arrangement, indeed, there is nothing prettier than the latter, especially to arrange with the light plummy grasses. The Japan grasses, *Eulalia zebrina* and



variegata, bear an abundance of beautiful flowers, and the *Erianthus Ravennæ* is quite their peer. While there are always the different sorts of *Everlasting Flowers*, and the wonderful crimson and gold *Cockscomb*. But these are an every day affair, and enter into everybody's arrangement for parlor or sitting-room vases. There is much more personality in

"Rowen mixed with weeds,
Tangled tufts from marsh and meads."

A bunch of some of the *Gnaphaliums* or *Cudweeds*, a handful of *Rose-hips*, a nodding stalk of *Golden-rod*, from which

the yellow bloom has departed, and there only remains a soft pallor; *Milkweed* pods that have not yet unloaded their silken freight, and the curious seed vessels of the *Evening Primrose* make an arrangement with some individuality in it. *Teasels* give character to a bouquet, and seem bristling with independence and originality, like brusque people one now and then meets. The seed vessels of the *Yarrow* and of the *Yellow Dock* are pretty in shape, and the latter are of a rich color.

Then there are the autumn leaves, especially the beautifully spotted *Birch* leaves, like some wonderful lacquer, and the rich russet *Beech*, which, if gathered in branches and pressed just as they grow, make a charming decoration. The smaller vines of the *Virginia Creeper* gathered when it just begins to turn, (if later the leaves rattle off when dry,) and great bunches of the rich purple berries with their crimson stems are most useful to the decorator, and are especially so in combination with the *Clematis*. A careless trail of *Clematis*, with these purple berries placed here and there without apparent method, and the vividly colored vine of the *Creeper* mingled with the soft feathery gray, as if they climbed the arch together, was the charming decoration over a parlor doorway.

The foliage of the *Dogwood* has a rich tint not repeated elsewhere, and the autumn leaves of the *Chinese Pæonies* are not only graceful in shape, but are of a peculiar bronze tint, which is very effective when placed against the wall. For bold decoration the *Sumach* is unrivaled, especially for massing in corners, or for filling a large jar.

It would seem that earth had some little fear that while she lay dormant we would lose faith, would doubt, in the midst of the bleak and dreary winter, that there would ever be leaves and flowers, and left us these beautiful souvenirs as pledges of the "resurrection and the life." So these rose hips are mute promises of a glorious June, when fragrance will fill the air; these stalks of *Golden-rod*, pallid though they be, of another autumn rich in crimson and gold and plentiful fruition. We go to the woods on a gray day in autumn; the ground is sodden, a mist is falling, the brook gives a sullen murmur, there is nothing of life or beauty. We feel truly

that it is "the transition time, when earth seems as if she could not reconcile herself to winter, but lies abject and helpless, grieving over her own decay with the grief of a man over a wasted life, or a woman over her love-life all done," and sadly turn homeward, feeling that our walk has been fruitless, no aftermath of



any sort, none of that cheer which an hour's communing with nature always gives, when suddenly we come upon one of these pledges of faith, bare boughs veiled in golden glory, for before us is a sprout of Witch-hazel in full bloom. It seems to throw a mellow radiance over everything, it is typical of a dozen things; in it meet in fruit, flower, and promise of further fruition, past, present and future. And as we gather an armful of the tasseled branches, the last flowers held out by the hand of the dying year, a golden gleam shows in the west, and the gray gives place to crimson and saffron, as the sun for a moment illumines the melancholy day, fully restoring our faith.

Finally, there is a day that, although it is not the last day of autumn in the calendar, is, by some strange prescience, the very last in our mind, and, as the farmer hastens to finish his harvesting, we hasten to gather our final aftermath. It is warm, and there is a golden haze and a sleepy

silence; a fugitive leaf rustles down, a few little singers chirrup in the dry grass, and a few larger ones sing a sad little song in the leafless trees. In the swamp we find branches of the Tamarack with the pretty cones, and again a tree which a parasite moss has converted into a fantastic ghostly shape. Branches of this, clad in the delicate gray-green, make a beautiful filling for a large Japanese tea-jar, and would be a "motive" for an artist to apply to a screen. There are great bunches of the rich bronzy green leaves and scarlet berries of the Wintergreen to gather, and this plant is always to be found growing on a Lichen covered log, or at the base of a gray moss grown stump, one of the studies in color nature arranges for us. Not far off are the Pitcher Plants, which may be placed in a pot and make an interesting addition to the conservatory. And there is a bed of the soft green Ground Pine, and so many charming mosses that one is bewildered. There are yet a few more treasures to secure—the lovely Partridge Vine with its coral berries, and a bird's nest hanging the pathway. It is a pensile nest attached to the drooping branches of a young tree, and seems to represent so much of summer and happiness. So many sweet songs, so much simple faith and fidelity went into its building. It has been rocked by the breeze, kissed by the sun; the aftermath of a bird idyl, which we straightway gather to store in the living-room over one of GIACOMELLI'S bird pictures.

Just then there is a notable change, the leaves rustle around our feet as if they meant to tell us something; the wind has veered into the east, and there is a sensation of chill. We cannot see the hoary form that is to be the possessor of the land, but we feel that he is lurking behind the tree trunks and the clumps of bushes. The next morning, earth lies passive in a snowy embrace, but our aftermath is gathered, and "if winter comes, can spring be far behind?"

ADA MARIE PECK, *Waterville, N. Y.*



ARRANGEMENT OF FLOWER BEDS.

In arranging your garden, always keep in mind the character of plants when developed, and use accordingly. For a bed near the path you would not care to use tall-growing plants; neither would you care to use low plants in a distant bed where all individuality would be lost. Bear in mind that plants grow, and the tiny thing you set out to-day, will be, when developed, quite a different thing. Look ahead, therefore, when deciding where you will have your beds, and what you will have in them.

I never would cut up the front yard with flower beds, if I could possibly avoid doing so. A smooth expanse of grass before the house is more pleasing when left to itself than when cut up by beds, be they large or small, plain or fanciful. Locate your flower garden at one side and near the sitting-room, if it may be so, and let part of it be near the kitchen, so that those who have housework to do can enjoy the beauty and fragrance as they go about their daily labor. If you have flowers only in front of the house and away from the rooms in daily occupation, you will regard them in a sort of "company" light. You should have them near you, and consider them as companions in order to get the most enjoyment from them.

I would never advise any one to attempt working out intricate designs in a small garden. "It doesn't pay." The effect will be spoiled even if the design is well executed, for the circumscribed limits of an ordinary yard will not admit of a proper display of the bed, because beds in which a pattern is worked out in colors must always be seen from above, or from a distance, in order to have its beauties properly appreciated. Distance always lends enchantment in these cases. If you have large grounds, such beds can be made effective, but it is not worth while to attempt them in the ordinary yard. Let the design be simple and secondary. Have the flowers for themselves first of all. Let the arrangement of them in such designs as suit your fancy be of less importance.

Crescents, stars and diamonds are easily made, and contrasting colors can be arranged in them easily with good effect. A crescent can be edged all

around with pink Phlox with a center row of white, and the effect will be very pleasing. A star or a diamond can be planted with rows of different colored flowers, or can be edged with one color, and the center filled in with another in a mass rather than in rows. The Phlox and Asters are our two best annuals for this use. A crescent, in which the inner curve is fronting the house, can be made very effective by planting it to Asters of different heights. Use the tall growers for the farther edge of the curve. In front of these plant some of a contrasting color and lower growth. Edge the bed in front with the dwarf varieties. The catalogues will tell you about the habit of each variety. In order to make these beds effective you will have to bear in mind the fact that you must get packages of seed in which each color is by itself. Mixed colors cannot be used in carrying out designs in which success depends on contrast of color in fixed proportion and definite location. Stars or diamonds can be planted with tall growing plants in the center, using lower growers about them and edging the beds with such plants as Sweet Alyssum, Candytuft or Mignonette. A charming circular bed can be made by using Calliopsis in the center in sufficient quantity to form a mass when the plants have developed. Surround it with white Phlox and use Mignonette as a border. If you have a plant of perennial Larkspur of the intense blue variety to set in the center, the effect will be heightened. Some might think that the combination of blue and yellow in the Calliopsis and Larkspur would be discordant, but such is not the case. Both are so intense in tone that the effect is quite different from combinations of ordinary blue and yellow.

If you buy plants, you can make very effective combinations with Geraniums of different colors. The pink varieties are most pleasing when used in quantities. They do not tire the eye as the flaming scarlet of other varieties do. The salmon varieties are not very satisfactory for out door use in our fierce northern summers. The pink ones, however, stand the sun quite as well as the scarlets do.

For low beds, near the path, use Portulacas and Verbenas. Plant Zinnias in

the background. Pansies should be kept in shady locations and by themselves. They do not combine in beds with any other plants. It will be found

that all plants are more effective by themselves, or at least in considerable quantity, than when mixed with others.

EBEN E. REXFORD.

THE BEDDING SYSTEM.

There seems to be a current of reaction gathering in England against the modern system of bedding flowers in June in masses or rows. It is not objected to in large grounds, or public parks, or in the fronts of grand edifices, where the lines of color are in keeping with the extended lines of architectural detail; but in small gardens it is pronounced absurd. There are other grave objections to it, besides this violation of taste, symmetry and relation to the grounds and edifices which it is intended to help to adorn.

It keeps the beds bare till June, and then, when the summer heats come, there is a hot glare of color. It precludes attention to, or even possession of, the many varied flowers which used to charm the senses by their soft shades, and sweet fragrance, and constant change of view. Even where a professional gardener is kept, the care and propagation of the bedding plants through nine months, to bloom but three, leaves no time or means to give due care to the Lilies, the Ivies, the Delphiniums, Dianthus, and other beauties of our former gardens.

It reduces the art and skill of gardening to the mere mechanical operations of growing so many scores or hundreds of a few flashy flowers, of setting them out in rows, and of clipping redundant growth afterwards to preserve the lines of color. The placing of the various flowers of the mixed parterre so as to show harmoniously in size, foliage and color, and to succeed in a continuous and varying display required more skill and taste. In

the ribbon-like rows or masses of modern beds, there is no individuality, one plant is just like another; none are allowed to show their pretty caprices or their lovely native graces. There is nothing to study, nothing that a child can train, or copy, or imitate, or dissect, nothing but raw and gaudy color. Flowers must not even be gathered or the beds will be spoiled. There is, as a rule, no fragrance, nor variety, nor fringe to make up a bouquet with; while, on the contrary, our old loves, the Pinks, the Sweet Peas, and scores of other charming flowers, yield the more the more they are picked, because of not being exhausted by excessive seeding. The good old flowers are embalmed in the finest gems of poetry, and thus have pleasing associations, calling up thoughts and dainty rhymes which double the interest with which we view them. Bedding flowers have not even an English name.

A happy mean may, perhaps, be found between the pretentiousness of an over display of bedding plants and the total neglect of old time favorites. A bed or two of rich color, with or without softening foils of foliage or shaded tints, is a great adornment even in a small yard, but the ground should be well flanked or whiskered with choice shrubs in cleanly kept beds, with the standard flowers set among or fronting them, or in separate borders, as suits their individual requirements. Such an arrangement gives, even on small space, ever-varying subjects of interest for hour after hour.

W.

SWEET CORN.

It is considered to be a decided point in amateur gardening to obtain Sweet Corn as early in the season as possible, and to effect this desired object it should be given the most sheltered situation one has at his command. Although Corn can be grown in any soil and situation, yet no vegetable will better repay a judicious selection and a proper preparation of the soil. It does best in an enriched

sandy loam; this should be plowed deep, and then be thoroughly harrowed so as to level it off smooth, when it should be marked off into rows two and a half or three feet apart each way. At each intersection a good shovelful of well decayed manure is placed and mixed with the soil, forming a slight hill, in the center of which the seeds are to be placed, covered about an inch in

depth, and the whole pressed down firmly with the hoe. Six or eight kernels should be scattered in each hill, and, when the plants are up, all but four of the most promising should be removed. Keep the growing crop well cultivated and free from weeds, and at each hoeing let a little fresh earth be drawn up around the plants.

Another method, and one it will be well to adopt, consists in giving the ground a good dressing of well decayed stable manure, and then plowing it under; harrow thoroughly and then mark it off into drills two inches in depth, and from two and a half to three feet apart. In these drills the seeds or kernels are planted about eight or nine inches apart, and covered to the depth of two inches; cultivate as previously described. Grown in this manner, a great yield will be obtained if the ground is in good condition and the growing crop properly cared for.

The first planting should be made about the first of May, and from this time until the end of July a planting should be made once a week to insure a constant and uninterrupted supply. It occasionally happens that the last planting does not reach maturity, but this seldom occurs.

Of the several varieties in cultivation, the following are most justly esteemed:

Dolly Dutton. This is an extra early variety, and desirable for the first plantings only, and to enable it to do its best it should be given a deep, well enriched soil. If grown in hills let them be two and a half feet apart each way; if grown

in drills let them be two and a half feet apart, the plants standing a foot apart in the drills.

Early Minnesota. The ears are larger, but it is a few days later than the above, and, like it, suitable only for the first and second planting. If grown in hills, let them be placed two and a half feet apart each way. In drills, two and a half feet apart, and let the plants stand one foot apart.

Early Concord. This is one of the best of the second early varieties, and in good, rich soil will produce ears almost as large as the taller growing sorts. It is the best variety for the main summer crop where garden space is limited, as it requires less room than the taller growing sorts, and produces ears almost as large. Plant in hills three feet apart. If grown in drills, let them be three feet apart, the plants standing a foot and a half apart.

Amber Cream. This is what is known as a late variety, and grows about six feet in height. The ears, which are from ten to fourteen inches in length, are of excellent quality. The kernels are amber colored when dry, but beautifully white when cooked. Plant in hills three feet apart each way; if grown in drills, let them be three feet apart, the plants standing eighteen inches apart in the drills.

Egyptian. This is another tall-growing variety, producing large sized ears, of a peculiarly rich and sweet flavor. Like all other large-growing sorts it matures late, and should be planted as advised for the Amber Cream.

CHAS. E. PARNELL, *Queens, N. Y.*

A FARMER'S PERENNIAL GARDEN.

I happen to know a farmer who is very fond of flowers, and yet does not feel that he can spare time for the culture of a regular flower garden. Yet he has one of the best and most floriferous collections with which I am acquainted, so large, and so gay with bloom through all the growing season, that it attracts the attention of people living on the hills above him a mile away. This brilliant spot of color in the landscape is produced in a very easy way, and is managed and cared for at the expense of but a few minutes' work daily. The list of plants is a long one—hardy perennials in the borders around the

whole piece of about one-tenth of an acre, and self-sown annuals in the beds. Weeding, thinning and transplanting constitute about all of the work, and as ashes, plaster and commercial fertilizers are alone used upon it, the weeding is a very small matter indeed.

This garden was begun as much as fifteen years ago, in fact, I think it the original of the idea of a "wild garden." The only woody bloomers in it are the hardy Roses, Viburnums and Lilacs. It is too far north for many kinds which could be made to succeed elsewhere, too cold for Tree Pæonies, to say nothing of

Altheas and the many other gay blooming shrubs that might be grown southward. Hardy climbers, Honeysuckles, Celastrus, Clematis, &c., are not planted in this garden, though the owner has them around his buildings. Aside from the shrubs in the outside borders, which are alternated with Aquilegias, Hollyhocks, Pæonies, Phloxes and Perennial Poppies, the body of the garden is given over to beds of hardy bulbs planted in masses, but not thickly. These give the first bloom, which is succeeded by self-sown masses of Pansies, Portulacas, Poppies, Phlox Drummondii, Eschscholtzias, Candytufts, Clarkias, Petunias, Delphiniums, Whitlavias, Silenes, Scabiosas, Lupines, with Four O'Clock and Hollyhocks in the center and corners, all grown now for many years entirely from self-sown seeds. The beds are arranged in squares of six feet, and by thinning and transplanting, a continuous and complete succession of bloom with alternations of color is maintained throughout the season.

The plot chosen is one upon which snow lies continuously and deeply all the winter, thaws being rare and short in this region. In consequence the ground is kept free from frost, and as soon as the snow melts, the Snowdrops and Crocus appear, together with the annual seedlings in great profusion, one after the other, as the temperature of the soil rises. Skill in the recognition of these

seedlings by their seed-leaves is an essential element in the carrying out of the plan of this garden. Millions of them are scraped out by the cross-scorings of a narrow hoe, yet enough of all are preserved to entirely cover the ground at maturity. Thinning is systematically practiced with a view not only to uniform growth, but also to succession, the earlier blooming sorts being withdrawn to give place and space to later ones, and these to still later ones. A good deal of ingenuity is required, as well as judgment and prevision, to secure successive clouds of bloom, changing in one week from one color to another, over sections and strips of ground. It is like the playing of a game.

An inexperienced person would be surprised at the vast quantity of cut flowers yielded by this inexpensive garden. Churches and private houses are decorated with its products and the guests of several large summer hotels are supplied with bouquets most lavishly. Though the garden was started without a thought of profit, as much money has been realized from it as could be gained by any other crop. But the chief benefit arising to the owner is in the mental and moral stimulus it affords, and the change from mere business farming to something in the nature of a fine art, however humble in reality it may seem to others.

T. H. HOSKINS, M. D.

PLANTING ASPARAGUS.

There are two cheap, easy, rapid and very effective ways of doing the work of planting an acre of Asparagus well.

First, supposing we have a fine fresh stock of yearling plants dug, trimmed to six inches and counted for the job, safe in the shade, handy by, and that the land, full of manure, fine and free, is fresh from the plow and smooth from the bush in April, and that we had rain the day before to lay the dust and make things pleasant.

To have square work on this patch let us begin on the square corner of it, if there is one. This is where a sixteen-foot square of Pine, opening with a hinge at one end and having an adjustable brace, will come in play. Let there be three rows in each bed, two feet apart, with the plants two feet apart in the row, the

beds four feet wide, till the land is used up; driving an inch square peg of pine firmly at each end of every row. This laying-out work will have been done the day before, or before breakfast, if the boss is any sort of a man to get ready. Now for a garden line, and I suppose there is only one first-rate one in the world. I don't lend it, but will tell how it is made. There ought to be thousands of these in market. Take the usual cast-iron reel and peg, one of the largest size, break the peg from the reel and throw both pegs among the old iron, getting some good hammer-smith to make steel ones six inches longer, in their places. Such a reel will last three generations of careful gardeners. For the line, buy several pounds of the white cotton cord, woven or braided, round and hollow, for

use among looms, small machinery, and so forth in our mills. Don't be stingy about the size. This braided cord never kinks, and being hollow dries out quickly so as not to rot if it gets wet. It is really cheaper than a dozen good-for-nothing jute strings, full of knots and always kinking and breaking. The line while new should be marked in feet with some black color that won't rot the fiber. Stafford's commercial ink is good. Some mill ought to be doing the marking for us.

With this good line stretched between the pegs of a row, and supported from the ground by other pegs, if needful, having small dove-tail notches sawed in their tops, we are ready for quite a number of people with spades and trowels to help plant, if the field be a large one; or one person, and that a woman, if needful, may work alone.

I said in the beginning that this is an easy way, but I forgot that not one out-of-doors worker in ten, nowadays, can stick a spade and make a deep cleft in the ground plumb under a line and by a mark suspended a foot above the surface. That's what we want to drop the roots of the yearling *Asparagus* into, spread fan-shape. Not an hour-glass-shaped cleft, either, bigger at the bottom than at top, but wedge-shaped, butt uppermost, to be easily closed around the plant when it is in its place, with the crown three or four inches below the surface by two or three thrusts of the trowel, minding the line, too, in case a pur-blind fellow has had hold of the spade.

Eyesight is scarce now, because all the lads fit for plowmen are wanted as engineers. However, this spade business is not laborious, but rather genteel, the master can do it, or a keen eyed mistress can make the marks, letting under-strappers with spades follow, they helping plant, shift the line, &c., while she sees that the work goes tidily and in order.

Some critic may say that this plan won't work, because, in nature, *Asparagus* roots do not grow fan-shaped. This is good theory, but for active yearling plants set in rich ground during the month of April, it doesn't amount to one copper in practice.

The wary cultivator will watch this newly planted patch, and if he is sharp in seeing the silken threads of sprouting

weeds in the soil, the horse-hoe will be run in time to save the first weeding and before the *Asparagus* buds have started much, which can be easily told by examining the warmest corner of the plantation. Perhaps my critic will be better pleased with the following plan:

Second. This takes lusty plants, two years old or more, trimmed to twelve inches, for planting in the furrow after a big swivel plow. The soil may be as deep and rich as years of *Celery* planting will make it. This time we cover the land with twenty cords of stable manure to the acre, more, if we have it to spare, than we can ordinarily plow under.

The next thing to do is to stake the land, as before, except that the stakes need to be two inches square and two feet long, to stand three feet back from the bed, stiff enough to bear a nudge from the plow, if that happens. For we propose plowing as we plant, and covering our plants with the plow, working by the square, as before. We can use plenty of lively help, if it will mind how things should go on. In my last undertaking of this kind I had seven helpers, not one of whom had ever seen *Asparagus* before or could speak English.

First plowing the selvedge of the piece—two or three furrows at one side, stopping the team while all hands stuff each furrow nicely with the manure belonging to it—we come to and clean out a furrow straight as a line between the stakes of the first row. In this furrow our valuable garden line, lying right along side, is to be stretched, and the crown of each plant is set under its particular dot on the line, two feet apart, adjusting the roots comfortably, lengthwise of the furrow. Work slowly to begin with, till greenhorns twig the motions, snapping the line frequently to keep it straight. Then, "stand back; jerk away the line and poke in the manure!" Use ordinary or light three-tined hay forks, and it will do good, and no harm, if this stuffing of manure over the plants is walked upon and trampled snug as it is put in.

Next will come two narrower furrows blank, or with only manure in, unless the plow in use is a very broad one. So our finished work looks like nothing but plowed ground. The furrows we plant in need not be plowed as deep as we can plow. Five inches is deep enough for

them, and tidy workmen will stand on the manured side and not be trampling the plowed ground at all. With a swivel-plow to work with we can have our baskets of plants, manure forks, &c., scattered along the line quite conveniently upon the unplowed ground.

All we have to do in this business is to mind the stakes and our line every time, and settle the plants well in place beneath the stuffing of manure in each row-furrow. The horses can't knock a crown out of line under that covering of long manure.

When the job is done, an old style gardener will stare and smile superiorly if you tell him "that's an Asparagus bed,

that plowed ground yonder," but if he is in any way sharp, he'll see the immense saving of labor when you show him how it was done.

Watching the soil for weeds the shrewd cultivator will harrow the patch in the nick of time, and like enough get in two harrowings and a horse hoeing, minding his stakes, before the "grass" gets up, and if he had strong, fresh dug plants—no matter if they were carefully plowed out of the ground—and he works honestly all through, it will please him to see the bulky heads poking their way out of the clean ground, right in line, some fine morning in May.

J. B. OLCOTT.

HEMEROCALLIS FLAVA FOR WINTER FORCING.

I am aware that this beautiful and very desirable, hardy, perennial plant has already been truthfully described and illustrated in your May issue of last year, but not yet having noted what I have recently discovered, I will add this as an addenda to that short article. Last November, a gentleman of this place desiring the removal of some clumps of this plant to another position, and lacking time, after lifting, to reset them, they were packed carelessly in boxes of earth, and set aside in a pit, where they remained until a few days since. On examination they were found not only to have advanced considerably in leaf growth, but had thrown up from three to five flower shoots each, some so far developed as to reveal the exquisite canary color, which, to my taste, is one of its first attractions. These were removed at once to a warm

greenhouse, and I feel sure an abundant crop of flowers will be the result. I had thought this plant quite common, but read in above alluded to article, "although old 'tis rare." In my conceded beautiful garden it grows in grand clumps, from two to three feet wide, and from early May to hard frosts 'tis a rare occurrence for it to be out of flower; but in May and June it is crowded, often from thirty to forty strong flower stems, crowned with from three to eight flowers, which open day after day until exhausted. I think no cluster of flowers quite complete without a dash of gold to it, and what more lovely or desirable than these three attractions—exquisitely graceful Lily shape, pure canary color without and within, and delicious Jasmine fragrance.

J. S. R. THOMSON.



FOREIGN NOTES.

EUCHARIS AMAZONICA.

As some of our readers are trying to raise this plant under unsuitable conditions, the following method, given by a writer in the *Gardeners' Chronicle*, may be acceptable:

"In order to grow and flower this popular, sweet-scented flower satisfactorily, the bulbs should be potted every second or third year in a compost consisting of three parts fibry loam and one of pulverized cow-dung and small charcoal, with a dash of coarse sand. In potting, the bulbs should be sized, and kept close to the surface of the soil, giving tepid water to settle the latter about the roots, after which no water should be given, except a slight sprinkling overhead morning and afternoon in damping the house, until the roots have pushed into the soil, when weak liquid manure should be given when necessary, until the soil is well filled with roots. It should then be withheld until the flowering spikes appear, when the application of liquid manure at the roots should be resumed and continued for a few weeks after the plants have gone out of flower, at which time the plants should again be rested for the purpose indicated, and so on throughout the year."

It is added that the plants should be given a hot-house temperature.

THE PURPLE BEECH.

All thoughtful planters know that the Copper Beech is one of the principal pigments upon the landscape gardener's palette, with which to paint the landscape, and as artists are always careful in the use of their high colors, so, in like manner, does a judicious planter take care how he distributes his few precious high tones which are so important and telling in true ornamental planting, and so productive of bad results if thoughtlessly planted.

The grouping of Copper Beeches with other trees requires much thought to do it well. Sometimes one sees happy combinations result from hap-hazard planting, but it is always best to well consider

where to place such important trees. There can be no rule, but there is a principle to act on. A Copper Beech never produces the best effect if any heavy green tree is close to it, neither must it jar with a tree of similar color, like that of the Purple Sycamore, or Purple Birch, though a group of Silver Birches could not have a finer setting than the Copper Beech. It never looks well if planted out in the open, where its full outline can be seen against the horizon. I should always seek for it a background of larger trees. Pleasing contrasts are most effective, such as combining it in, or making it form part of, a group containing Laburnum, which makes a charming picture in spring, and, for carrying out the contrast through the summer, one could associate it with a pale green tree, none better than some of the American Oaks, whose leaves unfold a soft yellow, and getting greener as the Beech deepens in color toward summer. Couple a Copper Beech and *Quercus palustris*, and every May you will enjoy seeing a picture as pleasing as any two trees could produce. These are only a few instances of the way in which this fine tree can be effectively planted.

W. G., in *The Garden*.

INDIAN CORN AND PHYLLOXERA.

It is announced from Austria—and what a chance if it should be true—that means have been found, at once economical and sure, of combating the phylloxera with success. Three large vine-growers of that country, in whose vineyards the phylloxera had commenced its ravages, remarked that some vines near which some Maize had been planted had not been visited by the dreaded pest, although a little further away some exactly similar vines growing in the same ground perished rapidly. The idea in consequence occurred to them to plant some Maize in the contaminated portions, which was done, with the excellent result that the phylloxera abandoned the neighboring vines. This fact is explained, it appears, not by the disappear-

ance of the offensive insect, but by the marked preference it accords to the Maize, owing to the substance of the latter being more tender. The Maize, then, is an expiatory victim, being eaten instead of the vine. The means indicated are, it is said, to be applied to all parts of Croatia, a region where the Maize grows well, and where the phylloxera is very destructive. It would seem that the plan is worth trying by vine-growers in all countries where the Maize will grow.

Le Courrier de L'Europe.

BEAN WEEVILS.

An English experimenter, Mr. THEODORE WOOD, according to the *Gardeners' Chronicle*, has lately published the results of a number of trials with Beans infested with weevils. The general impression is that, provided the plumule or the radical be not injured, the plants do not materially suffer from the mere perforation and partial consumption of the cotyledon. Mr. W. shows that, for a time,



BEAN WEEVIL,
BRUCHUS GRANARIUS.

plants raised from seeds thus perforated show no signs of weakness, but when the flowering period arrives then the blossoms produced are few and small, the plant withers and sometimes dies without producing a single pod. Further experiments of Mr. W., made with five different varieties, showed that the total produce was so greatly diminished as to leave no ground for doubt that the presence of the weevil in the seed is highly detrimental, affecting to a very considerable degree the reproductive powers of the future plant. The mischief done to Peas by the

Pea weevil, *Bruchus Pisi*, is of the same character as that of the Bean by the Bean weevil, though the latter insect eats several holes in the seed, while the Pea weevil makes only one. The injury to the vitality of Pea plants produced from buggy Peas may not be so great as that to the Beans, as shown by the experiments mentioned, though positive proof of this is lacking. At all events, one should be careful to secure sound Peas, as well as sound Beans for seed.

CYCLAMENS PLANTED OUT.

Having found so many greenhouse plants to succeed so much better when planted out in summer than when kept in pots the whole year round, I last year resolved to try Persian Cyclamens in the same way in which we treat Callas, Eupatoriums, and a host of other things, viz.: planted out in the open ground in May. We selected a border close to a wall, and having dug it deeply and given it a good dressing of manure, the Cyclamens were planted out about one foot apart each way; and, beyond keeping them free from weeds, they received no attention whatever until September. Then they had produced fine heads of young foliage, and many were showing flowers. They were therefore carefully lifted with good balls of earth, and the way in which the roots clung to the manure, and their healthy, vigorous look proved that they liked a good rich diet and plenty of it. They certainly were altogether more satisfactory than if they had been kept in pots. When planted out they do not get so dust-dry as when in pots, and they are in a more equable condition both as regards moisture and temperature. They, therefore, enjoy their rest, and start afresh with renewed vigor.

J. G. H., in *The Garden*.



PLEASANT GOSSIP.

THAT GARDEN LONG AGO.

I remember, I remember
A garden, long ago;
'Tis not laid out in modern style,
In curious bed and row,
And only sweet, old-fashioned flowers
Grow freely, gaily, there,
And make a mass of glorious bloom,
And perfume all the air.

Along the narrow gravel path
The violet Iris grows,
And on each side a Snowball bush
And royal Damask Rose;
While Hollyhocks, and Four O'Clocks,
And Pinks, and Poppies glow
In every nook and corner
Of that garden long ago.

I remember, I remember
The branching Lilac tree,
Its fragrant purple blossoms
So oft in dreams I see!
Once more I stand in wonder
To see the Primrose blow;
Ah, these are only mem'ries
Of that garden long ago.

F. A. REYNOLDS.

WINTERING POTTED LILIES.

I should like to know how to winter the potted Lilies. Mr. BISHOP, in the January number of your MAGAZINE, gives very minute directions for growing Lilies in pots. This suits me, as I am a wanderer—Methodist preacher—but he didn't tell us where to winter the pots, out doors or under shelter; free from frost or not.

A. L. M., *Trent, Ont.*

As the bulbs are perfectly hardy, considerable frost does them no harm in the ground, but in pots it is better when hard freezing weather is approaching, either to put them closely together in some well drained quarter out of doors and bank them well with earth, so as to prevent rapid thawing, or put them in a cool cellar. So long as they are not subjected to extreme changes, it is more a matter of saving the pots than the Lilies.

JAMES BISHOP.

CALADIUM-LAVENDER.

Will you inform me of the best way to keep Caladium bulbs and Lavender through the winter.

J. M. C., *Chemung, N. Y.*

The bulbs of the fancy-leaved Caladiums should be kept dry and warm, like Tuberose bulbs. A temperature not below 60° is best. Bulbs of Caladium escul-

entum can be kept in dry sand in the cellar.

Lavender plants, in this climate, need to be well protected during winter, and this can best be done by placing a box frame around them and filling it well with leaves, and at the same time covering the plants lightly with leaves. It is best to raise the plants in a cold-frame, and then leaves can be filled in all about them in the fall, and afterwards place on the sash. On fine days open the sash. Provide mats to cover the sash for greater protection in very severe weather. We should be pleased to hear from any of our readers at the South who may raise this plant, stating its hardiness with them and how they manage it.

BLUE BELL OF SCOTLAND.

Please give the botanical name of the so-called Blue Bell of Scotland, and also of the St. Johnswort

E. E

Campanula rotundiflora, we believe, is generally considered in Scotland to be best entitled to the name, Blue Bell, but it is also applied to Scilla nutans.

St. Johnswort is applied by botanists as a family name of the genus Hypericum, without special reference to any one of its species.

TARRAGON.

Please tell us, in the MAGAZINE, about Tarragon, whether it is difficult to manage, annual or perennial, and especially is it hardy. I have a great desire to see the plant and to see it grow.

M. J. G., *Albion, Iowa.*

Tarragon is a perennial plant, easily raised from seed, and quite hardy in cold climates. The plant makes plenty of offsets, and can be freely propagated by division. Seeds can be sowed in the open ground in the spring after the soil has become warm.

AMAZON LILY-LAURESTINUS.

Will you give the treatment the Amazon Lily requires to make it bloom. Mine are in six-inch pots, on the highest shelf in my flower window, where it is always warm.

I have had a Laurestinus three winters; it looks thrifty, is in an eight-inch pot, and in a cool place,

but there is no sign of buds. I usually have had success with most plants that I have tried, but these two seem determined not to bloom.

MRS. H. F. H., *New Castle, Ind.*

The Amazon Lily, *Eucharis Amazonica*, requires more heat and a moister atmosphere than a window affords. It is not a suitable plant for window culture.

The *Laurestinus* will bloom when it has a little more age and has filled its pot with roots.

SEEDLING ROSES—PASSIFLORAS.

I have been trying to raise Roses from seed for a number of years, and have met with such poor success that I have concluded to write and ask you to tell, in your MAGAZINE, how it is done.

I have raised *Passiflora cœrulea* for two seasons, and *P. Constance Elliott* one season. They grew to be large vigorous vines, but not a bud or flower did they have. They were bedded out in open ground in full sunshine. One plant was near a dead Cherry tree, which it completely covered. The others were around a bay window. W. L. F., *Mexico, Mo.*

Rose seeds for sowing should be left in the hips, or seed-vessels, as gathered when fully ripe; these should be mixed with damp sand in a box, and be kept in this condition until such time in winter or spring that one may want to start them. The seeds can be removed and sowed in pots or boxes in the greenhouse any time after midwinter. The plants will appear in a few weeks, and then they can be pricked out singly into small pots and cared for as other young Rose plants until they can be planted out in spring after the weather has become fine. The young plants in pots in the house are particularly liable to mildew, and often perish from this cause. If, therefore, one has not the best facilities for raising the plants inside, it is better to allow the hips to remain in the moist sand until early in spring, when a small spot of sandy loam can be prepared in which to sow the seeds thinly in drills. Drop the seeds about three inches apart and cover them half an inch deep. Here they will come up and may be allowed to remain, without transplanting, until their growth is finished in autumn. By giving the proper protection the Hybrid Perpetuals and other hardy kinds can best be wintered in the spots where they have been raised; in the spring lift the plants, shorten in the tops and transplant them into good soil. If a few of the seedlings are left in the spot where they came up they will come earlier into bloom.

The Passion vines can be planted again

this season, in the same places they previously occupied, and as they have partially exhausted the soil, their growth will be less rampant. Up to the first of July the ends of the shoots can be plucked off, thus causing them to branch more freely, and also tending to produce bloom buds. However, if, after this, the plants should continue to grow very strong without giving the appearance of bloom, it will be well to search carefully and find the extent of the roots. This ascertained, dig a trench around so as to cut off half of the roots, and thus check the growth. With this treatment flowering will be apt to ensue.

CLEMATIS JACKMANI.

I wish to inquire what I shall do to make my *Clematis* branch. It comes up in the spring just one shoot.

MRS. J. W. F., *East Baldwin Minn.*

If the top of the plant is cut off a few inches, or several buds above the surface instead of close to the ground, as it probably has been, three or four shoots will start instead of one, as heretofore, in connection with close pruning.

LIMA BEANS NOT BEARING.

Why will Lima Beans not bear here? They grow and blossom all summer, but do not set. What culture would you recommend?

J. F. R., *Grand Summit. Kans.*

Plant the Beans on the poorest piece of soil you have, supplying no manure, and stop the growth of vines at the top of the poles by successive pinchings.

PANSIES.

V. L., in the January MAGAZINE, asked how an amateur could succeed with Pansies. I have had in the heat of summer, where the sun lay till late in the afternoon, Pansies an inch and three-quarters across, from seed two years old from the florist, and a ten cent packet in the beginning. I use a mixture of cow manure, partly rotted forest leaves and wood ashes. Three quarts of ashes to a bushel of manure is enough, but two-thirds of the soil of the bed of the manure and leaves is not too much for Pansies. It makes no difference whether the manure is fresh or rotted, that I can see, but it is best to have it buried with a couple of inches of rich soil over it, in which to set the seedlings.

A mulch of grass or leaves round the plants will keep the ground from drying,

but if it is not rainy they should be watered every night. I think it is best to plant the seeds in a large box filled with the mixture mentioned, and in the same proportion; as the seedlings are rather slow in growth they can be cared for easier in this way when small.

Young plants beginning to bloom, covered with evergreen boughs during the winter, bloom best in spring and early summer for me. And seeds planted as early as possible in the spring do best for late summer and fall. Pinching out the heart of the plants when small will make them branch more freely.

During the summer the size of the flowers can be kept up by watering two or three times a week with water in which cow manure has been soaked till the color of strong coffee; you can hardly give them too much of it, if it gets on the leaves rinse them with clean water. Pick off the faded blossoms; if you want seed tie a rag round the largest, finest blossoms, and leave but one seed-pod on a plant till ripe.

Crushed wood coals dug round dark Pansies will increase their velvety richness, but will make dark spots in yellow and light ones, and tobacco tea will deepen the color of yellow ones. Any other fertilizer makes the foliage of my Pansies spotted and the flowers small.

I think the secret of fine Pansies after good seed, is plenty of cool manure and water, water, water; then they will flourish in sandy soil and a southern exposure, mine are always weak and spindling in shade.

If your Virginian correspondent cannot follow my method on a large scale, four or five plants in a large box or tub can be made "a thing of beauty" all summer, at least, Pansies seem to delight in this treatment with me, in Maine. C. H.

MAN-OF-THE-EARTH.

In the MAGAZINE of last year you had an article on "Man-of-the-earth," mentioned in Miss THAYER's *Wild Flowers of Colorado*, and spoke of it as being rose-colored there, but we have it here on this place, and the blossoms are a beautiful creamy white. So it seems it varies in color, like other *Ipomœas*. The root grows to an immense size, and sometimes has been found very much resembling a man's body, hence its name. The root is

used here for medicine, being considered a cure for fever and ague. It is equal to quinine or aloes for bitterness, but it is a dangerous remedy, too, for an overdose will produce almost fatal results. Combined with some other roots and steeped it forms a lotion for the cure of inflammatory rheumatism. I thought, perhaps, you might like to know all you could of this singular plant, so I enclose my bit of information.

MRS. J. H. R., *Pilot Hill, Cal.*

FIRST FLOWERS OF SPRING.

Old winter will soon be gone, or grown so weak that we expect right soon to be rid of him. With his going comes the thought of the bright spring days and fresh, sweet breezes, and sunny slopes, where are sprouting tender living things that old earth has been cradling all through his campaign, and now sends forth timidly to astonish the first beholder at their temerity. In a short time the more sheltered spots of woodland will be gay with the lovely wild flowers that come to us, year after year, untended, save by the hand of their Maker, and of surpassing sweetness and daintiness.

But how many of the readers of our good MAGAZINE must wait for their woodland quest in April or May for these shy beauties, to hold treasured the first early flowers of spring? How many know that one's own home yard can become a wondrous spectacle long before the shady covert of the woods sends forth the wild bloom? So early as the first of March, or even the last of February, we welcome the dainty Snowdrop, modestly drooping its dainty cups, even while the snow lies heaped in shady nooks near at hand. Then the Crocus, of various colors, puts forth a plea for recognition. Among the earliest blooming varieties of these bulbs are the small yellow with black stripes, quite unique. Then the large white, pure large yellow, purple, and a novelty among them is a certain red-blooming variety with slender, pointed flower-cups, distinct from the others. Then comes, almost at the same time, our Glory-of-the-Snow, a dainty white and blue flower only lately introduced. But chief among these spring beauties, and held as prime favorites, comes the marvelous bloom of a whole forest of Scillas. Then, indeed, does summer seem to be upon the way,

when the bees are wild with delight, and the blue and white mystery looks up laughingly and demands whether there was ever anything half so sweet or winsome, just at home. Borders of these are very attractive for the garden beds or set in little groups in the midst of the sod upon the lawn, where they do quite as well as elsewhere, and are sure to surprise somebody. They seed themselves, and increase very rapidly, and will bloom all through April and May. It is well worth the trial of flower lovers to invest in these earliest of spring flowers, so easy of culture and so delightful. H. K.

A SOUTHERN GARDEN.

I want to let it be known through your MAGAZINE, that the *Daphne Indica* is the most satisfactory plant I have ever found to grow in the South, in our pits, where we have no artificial heat. I have a very large one in my pit, and it has been "a thing of beauty" and sweetness ever since the first of December. At one time it was as white as a Snowball bush. My Geraniums bloom very little during the winter months, but my *Daphne* has furnished us with flowers during all the cold weather. Mine is the only one in town, but I think now, before another winter, every lady who owns a pit will have one. But take care for that other little *Daphne*, *D. Cneorum*. I have spent two dollars at different times for that, and just can't make it grow.

I would also state that I have better success with the *Lilium lancifolium album* than any other Lily I try to raise here. I have the flowers in such profusion that I often send them to my friends, a large waiter full at a time, all from one bulb procured about seven years ago. I raise the *L. lancifolium rubrum* also, but it is not so thrifty as the white. I intend to try my hand now with the *L. Harrisii*.

Then I must tell you about my *Canna Ehemanni* that I purchased from you last spring; but before I give you a description of it I want to state to you, very emphatically, that I am not a woman who is given to exaggeration, but simply state facts. When I received the tuber, in February, I believe, I potted it in a tin oyster can, until the weather was warm enough to plant it in open ground. It commenced blooming the first of June and bloomed profusely until it was killed

by frost, in November, nearly six months. It was more admired than any thing in my flower garden all through the summer. When the frost came I had the roots dug up, and a grown man was not able to pick up the clump and carry them to the pit. The clump will fill an ordinary-sized wash tub. The stalks were eight feet high as they grew in the garden, and the foliage was immense. It was planted in a very rich spot, but my whole flower garden is rich.

I have a great many ever-blooming Roses, and have been in the habit, for years, of having fresh stable manure thrown around the roots for protection in the winter, and then, in spring, I have it pulled back from the Roses and spaded in. In this way the ground has become enriched, and accounts for my large *Canna*.

We have had a delightful winter, and now, February sixth, spring is fairly upon us. The *Pyrus Japonica* and *Forsythia* almost in full bloom, and Tulips and Hyacinths coming up.

MRS. J. W. BURRESS, *Baldwyn, Miss.*

FLOWER-BED DESIGNS.

A book of flower-bed designs for carpet and ornamental beds, is issued by GEO. A. SOLLY AND SON, of Springfield, Massachusetts. This book will prove of especial value to those having large grounds to ornament. The figures are good and the selections of plants carefully made. The designs, with few exceptions are too large and intricate for small places, but residents of suburban and small village lots probably understand that this style of gardening is not adapted to their situations. We commend it to those having large grounds and intending to ornament them in bedding style.

PERENNIALS.

Precious the hardy green that frost survives;
Pleasant it is, when January's snow
Melts, for a space, and brooks resume their flow,
To pass the garden paths where Primrose thrives;
Where scarlet Columbine its honey hives
Safe 'neath the sod, shielding with leafage low,
Its future flowers; where all the Violet's glow
Lives in its leaves, eluding winter's gyves.
Sweeter and fairer than fair summer's brood,
Fancy sees here Heartsease and Violet,
And fringed Pink, in bursting calyx set,
And brave red Bergamot and quaint Monkshood,
Gold powdered Snapdragon, Carnation fine,
And balmy bloom of Honeysuckle vine.

ABBY S. HINCKLEY.

A CALIFORNIA WILD ROSE.

When Sir JOSEPH D. HOOKER and Dr. GRAY made their botanical tour across the country to the Pacific coast, in 1877, Dr. HOOKER gathered some seeds of a wild Rose in the Upper Sacramento Valley, at an elevation of about five thousand feet. From these seeds he raised



ROSA PISOCARPA.

plants. The illustration herewith shows foliage and flowers. It is, for the time, called *Rosa pisocarpa*, though eventually it may be found to be a small form of *Rosa Californica*, which grows coarser and stronger, and with large flowers. This plant is said to be of small, slender, straggling growth; leaves dark green, two or three inches long, leaflets three-quarters of an inch in length; flowers, an inch, or a little more, in diameter. From its low-growing habit it is thought it may be of some value as a rockery plant. It is not in the hands of propagators.

BEE FLOWERS.

A writer in the *Gardeners' Chronicle* says that "the blossoms of Gooseberries, Currants and Raspberries, though unattractive as regards color, divert the attention of bees from all the brighter flowers about. Oddly enough, two apparently tempting flowers, Sweet Alyssum and Sea Kale, are passed over unvisited by bees. Nearly all the Borageworts are useful bee flowers. Marjoram, Thyme and Hoaround are invaluable in their season."

WINTER PEARS FOR ENGLAND.

On the 9th of last December, ELLWANGER & BARRY, of this city, sent to the publisher of *The Garden*, London, England, a collection of Pears, as an experiment to ascertain if it is practicable to ship Pears to London at that season of the year. The varieties sent were Easter Beurre, Anjou, Beurre Gris d' Hiver, Columbia, Josephine de Malines, Winter Nelis, six specimens each, and four of Lawrence, and three Duhamel. "They were sent," says *The Garden*, "in a rather deep box, and unfortunately the pressure left a space between the fruit and the lid, and the consequence was that the fruit was knocked about considerably during the long and perhaps stormy voyage. Notwithstanding this, and that a great many were battered and unrecognizable, some very fine fruits of the best

kinds came to hand safely; and we have not the slightest doubt that if sent in shallow trays, each fruit wrapped up carefully in paper, and all packed carefully with paper shavings, so that they could not move about, no matter what vicissitudes they went through, such fine fruit as Easter Beurre would arrive in a perfectly safe condition—as safe, practically, as the fruit that comes to us from Western France, and they would in that condition find a ready market in London, bring a very high price, and pay the American fruit grower much better than Apples."

The varieties that traveled most successfully were Josephine de Malines, Easter Beurre, Winter Nelis, and Beurre d' Anjou. A London fruit commission firm says that such fruit as this sent from America should be packed in single layers in cases of half inch pine. The dimensions, which are not to vary, should be twelve by eighteen inches, with a depth of five and one-half inches, all outside measurements. The case should be lined with tissue paper, and each Pear separately wrapped in it, and a sufficient

quantity of paper shavings should be used to prevent oscillation, absolute firmness being essentially necessary. All the fruits in the case to be of uniform size, and the number it contains, eighteen, twenty-four or thirty, as it may be, together with the name of the fruit should be stencilled outside each case. Despatches of irregular numbers, or Pears of irregular sizes, or careless packing will surely have a bad result. The name of the firm to whom the cases are consigned should be marked plainly on the box, while the consignor should have a distinctive brand, by means of which he could found a reputation which would be of the greatest service to him in getting a good market. Shipments are best sent *via* Liverpool to London, as this route is quicker and not so expensive as sending to London direct. It will not pay to send early or fall varieties, as they will come into competition with the French shipments.

Beurre d' Anjou, Easter Beurre and Josephine de Malines can be cultivated either as dwarfs or standards, as they all succeed well on the Quince. Winter Nellis is best top-grafted on Pear stock.

VINE MILDEW.

The President of the Vine-growers' Society of Beaune, France, M. J. RICAUD, makes mention of the different preparations that have been on trial by him to destroy the mildew that attacks the foliage of the vines, the same fungus, *Peronospora viticola*, that so greatly injures the vine in this country.

The treatment lasted from the 23d of July to the 14th of August. The experiments were made with sulphate of copper dissolved in water in different proportions; and also, different mixtures of lime, sulphate of copper and water, and sulphate of copper, liquid ammonia of 22°, and water.

The most complete result was obtained by the use of sulphate of copper and water in the proportion of one pound of sulphate of copper to twenty-nine gallons of water, (four hundred grammes sulphate and one hectolitre of water). Not a single leaf was scorched, all remained intact until the time that they naturally fell.

The effect of the other substances, though partially satisfactory, was far from being perfect; on some of the leaves the parasite was not destroyed, and the

leaves perished. The simplicity of the successful method makes it the more valuable.

VIRGINIA CREEPER FROM SEED.

The seed as soon as it is gathered should be sown in a shallow box filled with light loamy soil, and covered to the depth of a quarter of an inch; then place the box in a cold-frame or a cool cellar, where it can remain until about the first of March, and then bring it into a warm, moist situation, and place it close to the glass. Water should be given as often as needed, and as soon as the young plants are well up and strong enough to handle, they should be transferred into three-inch pots filled with turfy loam. These young plants should be kept close and moist until well established, and afterwards removed to a cooler situation, to remain until the weather becomes warm and settled, when they can be planted out. Mice are very partial to the seeds of the Ampelopsis, and when sown care should be taken to guard them from these destructive pests.

CHAS. E. PARNELL.

ROSE "HER MAJESTY."

There is a general expression of disappointment with this Rose by those who for a year or more have been cultivating it, as it proves very much subject to mildew, and is one of the shyest of bloomers. It is probable that when these utterances of dissatisfaction shall have ceased, but little more will be heard about this Rose, which was ushered in before the public with a wonderful colored plate and the highest expressions in regard to its character. Thus, again, is repeated the lesson which horticulturists of all classes have so frequently heard—that of hastily placing on the market unproved and unworthy varieties.

MADEIRA VINE FOR SCREENS.

In an ordinary flower box place four to six tubers, let wire, of any height, be strongly attached to standards in the box, and as growth advances, train the shoots as needed. To cover a large screen for writing table, window, etc., is an affair of but a few weeks. The screen will continue primly neat and freshly green for years. I have seen them so used in a beautiful château on the Loire, whence I brought my first plants.

Gardening Illustrated.

THE HOLLYHOCK.

The value of the Hollyhock as a showy plant for a background for other and lower-growing flowering plants in the garden is well understood. These stately plants, with their bright flowers lasting for a long time, serve a purpose for which



HOLLYHOCKS IN VASE.

few other plants could so well be employed. The engraving here presented of a cut stem in a vase, made from a photograph, shows how the double forms are adapted for room decoration. This engraving has been reproduced from an English source, *Gardening Illustrated*. The variety of colors found in the flowers of this plant is something wonderful, ranging from pure white through almost every conceivable shade of yellow, rose, red, crimson, scarlet, carmine, to reddish-violet and ash-gray, and almost black.

The Hollyhock is usually classed as a biennial, but it often lives four or five years; it is, however, at its best the second year. The plants are easily raised from seed, which can be sowed early in summer in the open ground or in a cold-frame. It is best to shade the young plants from the sun during the hottest part of the day. If the plants stand thick in the seed-bed transplant them so as to give room for growth. Here they can remain until autumn, when they can be set where they are intended to bloom the following year. It is best to sow a few seeds every year, if one wishes to keep up a succession of plants. If half the flower buds are removed soon after they are formed, thus reducing the bloom, the plants will retain their vigor longer.

As a picturesque plant, the Hollyhock has abundant claims, and artists often show their good taste by giving it attention. It should oftener be employed for the fine effects that might be produced with it in the garden. But this art, the art of combining plants for effect, is one which the best gardeners are only beginning to acquire some facility in, after which but few have yet

striven, and of which the great mass of flower lovers and flower cultivators have as yet learned nothing. There is a great field for operations open in this direction, and any success achieved should be faithfully described and recorded. In the pursuit of this art the whole range of cultivated plants might be traversed, and every species and variety could be made to enter into new relations and combinations.

NEW YORK HORTICULTURE.

At the meeting of the Western New York Horticultural Society, in this city, January 26th, President BARRY made an opening address, reviewing the principal horticultural events of interest during the past year.

"Fruit culture has been moderately prosperous.

"Prices generally have been low, but this is a period of low prices, and we may as well expect them in the future.

"Our farms and orchards, as a general rule, should have twice or three times as much manure and labor as they now get. In the future it will pay much better to cultivate less land and do it well—poor cultivation will not pay. Above all other things, growing poor fruit will not pay.

"The production of fine fruit is not a mystery, but it requires care and skill, and a good deal of both. The trees must be kept in health and vigor. Insects must be kept in subjection. The fruit must be gathered at the right time and in the most careful manner, put in new, clean and handsome packages, and when all is done they must be marketed with judgment—nothing left to chance."

In the course of the address a sincere tribute was paid to the late MARSHALL P. WILDER, and the following paragraphs from it will be read with interest generally:

"The death of MARSHALL P. WILDER is truly a national loss—his labors were in behalf of the whole country—and his death will be felt and deplored everywhere. It comes to us with as much force as though he had lived and labored amongst us. During a period of more than half a century, he gave his time, talents and fortune generously and cheerfully, for the advancement of horticulture and pomology, and that, too, without the hope or desire of any other reward than that of doing good. That was the end and aim of his ambition. His efforts were guided by comprehensive and well considered methods; a rare intelligence and a zeal that never flagged, whether in health or sickness, until the day of his death. 'Let us go on,' he said, 'producing new and fine fruits, and thus provide blessings for future generations.'

"I had the pleasure of enjoying the friendship of Mr. WILDER for at least forty years. During the whole of that period we were associated in the man-

agement of the American Pomological Society. I have been in constant correspondence with him all that time. On the morning of his death he directed a letter to me and signed it with his own hand. I am told that this was the last time he wrote his own name."

A number of essays were read, and several addresses delivered by prominent horticulturists and scientists.

The reports from the different Counties showed that Apples were a failure very generally; in a very few Counties only was there a fair or moderate crop. Peaches were generally a failure. The Plum crop was very large, and the price so low that it scarcely paid to send them to market. Small fruits were plentiful, but the prices received for them were low and unsatisfactory. The general sense of the of fruit-growers assembled was, that while they were somewhat cast down they were not discouraged, but hoped for a favorable change in the future.

COAL ASHES FOR VINES.

I have read in the January number of the MAGAZINE the account of JONAS P. HAYWARD'S vineyard, and at different times have read the statements of others, but no one seems to have had the same experience as myself. Twenty years ago I planted vines in my yard, where I had to do a good deal of filling in, and the material employed was principally coal ashes. Wherever the ashes came in contact with the vines we had the largest crop of the finest Grapes I ever saw, the roots seemed to run riot in the soil to a distance of ten to fifteen feet, and were a mass of fine fibers. The Grapes were in large bunches that crowded each other for room, fine, plump, thin-skinned berries, while fruit on vines from the same aged cuttings, from the same parent vines, planted in the natural soil, were late, hard and sour. My varieties were Concord, Catawba and Ives' Seedling. A. B.

WORMS AT PEA ROOTS.

Inquiry is made for a remedy to prevent the ravages of the white thread worm, which destroys the roots of Peas. This is the first instance brought to our notice in any form of the worm mentioned. If any of our readers have knowledge of it they will do well to describe it, and send such information as they can of it for publication in our pages.

THE FLOWER-WOMAN OF PARIS.

The tourist visiting Paris views with interest and astonishment the shop windows, prettily and tastefully dressed, and the street venders of fruit, flowers, vegetables, and above all the flower-women of the streets. The 'cocoa-woman, or chocolate vender, has a peculiar dress, and while pouring out hot chocolate into a bright copper cup, is oblivious of the purchaser, while with her cries she en-

rod, Pinks and Rose buds, from the ever prolific Safrano to the common red Rose bud, all laid methodically in rows. As the customer demands a nosegay, she commences with the green leaves, then to the next row of small flowers, on to the next larger, on, on, finishing with the larger flowers, chatting, reciting some pleasant 'can-can, or *causerie*, of Paris news, invented, perhaps, for the occasion,



THE FLOWER-WOMAN OF PARIS.

deavors to attract the passer-by, with the hope of enticing him into buying a cup of the most delicious cocoa or chocolate. This class of people, I might say, are distinctively a race apart; one can read it in their faces. There is stamped individuality, freedom, liberty, independence, humor, or, as the French say, *esprit*. Bohemian is not the word for these people; they work, they sing, they jest, they make the best of life, accepting the honest work, which brings the daily bread, as a joy; and I think they have caught a gleam of the true philosophy of life.

I send a sketch of a flower-woman of Paris, in my neighborhood. Who does not know Bettine? It is as life-like as a hasty sketch could be of a very nervous, industrious and vivacious French woman.

The cart is full of Chrysanthemums, Marigolds, a flower resembling Golden-

occasionally a little song, a verse suggestive of the day of the month or birth of the flower, leaving a double aroma to the nosegay, which clings to it, and when placed upon table or desk the mind returns to the happy sentiment of the flower-woman, who demonstrated the cheerfulness of her disposition, and perhaps, unknowingly put, unpaid for, unsolicited thoughts in her floral offering.

She merits a sketch; she was one of the flower-women patronized by VICTOR HUGO, and followed the procession or escort to his final resting place—the Pantheon. The steps are still covered with wreaths and flowers, and his coffin exposed from ten in the morning until five in the afternoon. One soon forgets the loved dead in Paris; but if flowers can speak, surely they express the sentiment of love and adoration for the great-

est genius of this age—VICTOR HUGO. The cart of BETTINE is a mass of all the flowers of the season, picturesque, graceful, contrasting with her ungraceful appearance.

Note the large hands, the pose of the body, the ungraceful foot, the 'kerchief tied upon an unlovely looking head, yet the snapping eye warns the merry student no joke will be permitted which is not covered with several francs. She draws from some unseen compartment the utensils for preparing her breakfast, or dinner at noon, arranges her *côtelette*, and at the same time ties up a nosegay for a customer, often suggesting the flower he should wear.

Her flowers are always fresh and beautiful, the price for the same depending upon the appearance of the customer and her mood of temper.

How much patience the flower-women have! At all seasons and in all kinds of weather they are at their post, wheeling their carts from street to street. The fish-monger, rag-picker, old clothes dealer, cane and umbrella seller, in their quaint costumes, have been well modelled in plaster of Paris, and sold as objects of curiosity. What a sensitive people they are, loving country, and willing to fight for it, too. What an immense amount of "*amour propre*," believing Paris the capital of the world, the sun which shines for all other worlds. For matters of taste, is it not? France is the home of flowers. As the artist, whatever his nationality, when he has reached Paris feels himself at home, so, also, are flowers, from the Cherokee Belle to the Orchid. The Bey of Tunis exclaimed "home!" that means to lack no loved object one finds there; and in Paris I find all I love intensified, beautified, perfected, hence I am at home.

We think we adorn our churches in America, but just peep into a church here, and see the floral decorations; every flower is white or creamy white, giving a spiritual appearance to the place. What sums of money are spent for flowers! In America, I am told, the flowers are given to the sick in hospitals—happy thought!

ADA LOFTUS.

THE PLUM CURCULIO.—Spraying the trees with Paris green and water does not prove entirely effectual against this insect, though beneficial.

AGAVES AND OPUNTIAS.

A correspondent at Laredo, Texas, says: "I am living in the heart of the Cactus region. I have on my place a fence of growing Maguey plants, or, as you call them, Century Plants. Some of the leaves are fourteen feet long and ten inches thick at the roots. There is here a great variety of *Sempervivums*, or, as the Americans call them, Resurrection Plants. The mountains, a few miles from this place, are covered with them.

"The Prickly Pear, or *Opuntia*, are to be found here growing to the height of fifteen feet, with leaves or branches two to four inches thick. We feed our cattle on them. When we want them to grow we just chop a branch off and throw it on the ground; it needs no water."

CALIFORNIA FLOWERS.

I have recently seen a statement to the effect that flowers in California are destitute of fragrance. The person that made that statement probably has catarrh, or some other difficulty with his nose.

The flowers that grow in this part of California have just as much fragrance as those of the same kind which grow elsewhere. I know the truth of my assertion, as I have been a passionate lover of flowers from childhood, and have lived in several States.

Our wild shrubs, Manzanita and Chaparral, are almost sickening with the honey-like odor which fills the air. I have smelled the Roses from a garden across the street, as I have walked along, and sitting in a parlor have found the odor of Violets so strong that I looked around in search of them. The perfume of the Madeira Vine has drawn my attention to its unnoticed presence. The Daphne, the Narcissus, and Hyacinth, and Tuberose, and Heliotrope and Rose are just as sweet as they are in New York.

When out for a walk, on the fifth of February, I saw a double, variegated *Camellia Japonica* in blossom in the ground out doors, unprotected. Also, Roses, Verbenas, Violets, Pansies, Tritomas, Laurestinus, Japan Quinces, Daphnes, Narcissus, etc. There is a double white *Camellia* in Sacramento, in a garden, twenty-nine years old, over ten feet high, which bore, last year, in February, some two thousand blossoms. The owner has refused \$500 for the plant.

A year ago last Easter, a friend of mine gathered seventy Calla blossoms from her garden, to decorate the church with.

Our County is as far north as the southern portion of Illinois, and in Kansas, still farther south, one hundred persons and one hundred thousand cattle froze to death a year ago, while our Geraniums and plants were in bloom, and Oranges hanging on the trees. Vegetation will endure more frost here than east. Ice has formed four or five times this winter, but my Tomatoes and Nasturtiums were the only plants affected.

ANNA WOODRUFF, *Placer Co., Cal.*

COMPENSATION.

In that new world to which our feet are set,
Shall we find aught to make our hearts forget
Earth's homely joys and her bright hours of bliss?
Has heaven a spell divine enough for this?
For who the pleasure of the spring shall tell,
When on the leafless stalk the brown buds swell,
When the grass brightens and the days grow long,
And little birds break out in rippling song?

O, sweet the dropping eve, the blush of morn,
The starlit sky, the rustling fields of Corn,
The soft airs blowing from the freshening seas,
The sun-flecked shadow of the stately trees,
The mellow thunder and the lulling rain,
The warm, delicious, happy summer rain,
When the grass brightens and the days grow long,
And little birds break out in rippling song.

O beauty manifold, from morn till night.
Dawn's flush, noon's blaze, and sunset's tender light!
O fair, familiar features, changes sweet
Of her revolving seasons, storm and sleet
And golden calm, as slow she wheels through space,
From snow to Roses—and how dear her face
When the grass brightens and the days grow long,
And little birds break out in rippling song.

O happy earth! O home so well beloved!
What recompense have we, from thee removed?
One hope we have that overtops the whole,—
The hope of finding every vanished soul
We love and long for daily, and for this
Gladly we turn from thee and all thy bliss,
Even at thy loveliest, when the days are long,
And little birds break out in rippling song.

CELIA THAXTER.

TROPÆOLUM MINUS.

We have two flower beds that are very much shaded by the house and trees. The soil is light and sandy and too dry in summer for Pansies, and too much shaded for Heliotropes, Verbenas, etc. After experimenting with many annuals, we have found that Dwarf Nasturtiums suit the place admirably. They bloom profusely till frost, making bright beds, and furnishing an abundance of cut flowers.

E. A. W.

TREATMENT OF HOUSE PLANTS.

I have a specimen of Poinsettia that is now gorgeous, but how must I treat it when done blooming? But it does not appear to have bloomed, as the petals have not expanded. Are they always so?

Does the *Dracæna* drop its leaves underneath? I have a fine specimen of *D. terminalis*, but the under leaves come off.

I have also some seedling Gloxinias planted in early spring last in small pots. Must I repot them soon, or wait?

N. A. C.

The flowers of Poinsettia are small, and open but slightly; the bright colored bracts are the admirable parts. In April the new growth of wood can be cut back within two inches of last years' wood, and turning the plant out of its pot, reduce the ball of soil and put it in a smaller sized pot with some fresh earth. When frosts are no longer feared turn the plant out of its pot into the open ground, leaving it until September, and then repotting it in a pot larger than the one it occupied before, and taking it into the house.

It is the habit of the *Dracæna* to drop its lower leaves gradually as it grows.

When the Gloxinia bulbs begin to show life by making some shoots, they can be watered carefully and kept in a warm place until the leaves are out; then the soil can be removed and the plants repotted in good plant soil, and afterwards set in a light place; for some time now, and until active growth commences, much care must be taken not to supply too much water.

DAHLIAS—TUBEROSES.

Will you inform me how you set out Dahlia roots, that is, do you divide them, or plant them as they grew the year before? Some persons say, "cut them into four parts, leaving an eye on each." Is this the way?

Also, how soon should Tuberoses be taken up after blooming? I did not take up mine immediately after blooming, and when I did take them up they looked like small tubers growing around the old one.

D. A. G., *Marshall. Mo.*

The Dahlia tubers can be separated, dividing the crown of the plant so as to leave at least one eye with each finger or piece of tuber, and each part will make a good strong plant. Should more than one eye grow break off all but one, as the Dahlia should be trained to a single stem.

Tuberose bulbs should be allowed to remain in the ground to ripen, which will be indicated by the leaves turning yellow. They must not, however be exposed to frost. Small tubers form around the old one, which is no longer of any value, the

small ones are to be kept over until spring, and then planted out to grow to a blooming size, which may be after one season's growth, or it may be longer.

INSECTS ON BEANS.

Will you inform me what insecticide you would advise for the destruction of an insect similar to the so-called Colorado beetle, which, for the last three seasons, has infested the Beans, and which, last year, entirely destroyed the crop. Of course, Paris green cannot be used on the leaves, and as they attack the under side of the leaves, it is difficult to sprinkle the plants to any advantage. I tried, last year, watering with soap-suds and crude petroleum, but found no benefit.

H. M. M., *Boulder, Colo.*

As an experiment, at least, we should use the Insect Exterminator, and apply it with a bellows with a bent nozzle, thus throwing it on the under sides of the leaves.

PHOSPHATE FOR ANTS.

I have a very slight experience with ants, which I wish to mention. Several years ago I received a present in memory of a friend of a root of white Pæony. I planted, nourished and cherished it tenderly, but the ants loved it, and proved their love by sticking to it closer than a brother. One year ago last April I bought a barrel of dark colored phosphate for Corn. One day, in going past my Pæony bed of a dozen or fourteen plants, I sprinkled around the plants about a gallon of phosphate, thinking to make them bloom better, and I think it did. The bloom was very fine, and the plants very free from ants. The phosphate was applied just before blooming time.

E. T., *Jeromeville, O.*

GAILLARDIA.

Gaillardia picta, or Blanket Flower, is a low-growing annual which is very showy planted in beds or masses. It is a native of Texas, and flourishes exposed to the unclouded skies of summer. It comes early into bloom, and continues to grow and branch and send up new flowers all through the summer and autumn and until destroyed by frosts. In the colored plate of this month this species is shown at the upper left hand corner. The ray flowers are a bright red with yellow points. The other kinds shown in the plate are florists' varieties derived from *G. picta*.

A very handsome display can be made

by setting the plants in beds in masses, the different varieties separately, or mixed together. It is well to raise the plants early and transplant them into beds, but they can also be raised by sowing the seeds where the plants are to stand. No particular care or treatment is demanded, as the plants succeed perfectly in ordinary garden soil with an occasional hoeing or stirring of the ground to keep it free from weeds.

The double-flowered variety, *Lorenziana*, will make a fine bed by itself, though many prefer a mixed bed of bright kinds.

GARDEN WORK IN MARCH.

The present month will be a busy one for the gardener, his work varying somewhat with his locality. In the middle portions of the country the lawns will be raked clean and the transplanting of different kinds of hardy stock will be proceeded with; farther north this work will be delayed for another month. Lawns that need enriching can be top-dressed with phosphate, ground bone, ashes, or nitrate of soda. Seedling plants that need to be brought forward before planting out should be started at once; among these may be named Pansy, Verbena, Phlox Drummondii, Chinese Pinks, the blue varieties of Lobelia, Portulaca and Petunia. The seed can be sowed in pots or boxes in the house or in hot-beds, or, where the weather is mild enough, in cold-frames.

In the same manner, Cauliflower, Cabbage, Tomato and Egg Plants should be forwarded. Lettuce and Radish seed can be sowed in the hot-bed, and, in the latter part of the month, in the cold-frames.

When the soil is in proper condition, and the weather is suitable, sow seeds of Asparagus, Radish, Lettuce, Turnips, Beets, Cress, Parsnips, Salsify, Spinach, Peas, Onions, and other hardy vegetables. Onion sets and Potato Onions can be put out. In favorable weather set out Asparagus and Rhubarb plants, in order that they may get an early start.

The pruning of Grape vines should be done with the least delay. The Virginia Creeper will be all the better for a good shortening in the present month. Uncover by degrees the beds of Hyacinths, Tulips and Narcissus, first removing the

coarser litter and keeping it by the side of the bed to re-cover it if the weather should make it necessary; later in the month remove the finer portion.

In the middle part of the country the seeds of hardy annuals and perennials can be sowed in the open ground, but in the Northern States most of this work will be done in the next two months.

Wherever it is suitable, hardy trees and shrubs and herbaceous plants can be transplanted, and the earlier this work is done, when the conditions are favorable, the better for the plants afterwards. Gravel walks can be hoed, raked and have a new surface dressing of gravel and be rolled. When new lawns are to be made, the ground should be prepared and the seed sowed early. Prune Roses this month. All work should now be driven, as it will be easier to keep ahead with it all the season if it is pushed during this month, but a stern chase is a hard one.

OTTHONNA—SWEET ALYSSUM.

I notice Othonna is mentioned as fine for hanging baskets. My experience is that for the edge of window boxes or baskets or vases in the yard, or anything raised up from the ground, it does its very best. I once had upon a piazza a long box, and in the middle of it I put an old slop pail with a free-blooming pink Geranium in the center; in the box I planted a row of plants, and edged both pail and plants with Othonna. Very soon nothing could be seen of box or old pail, all being covered with the Othonna. In window boxes in winter, on the side toward the window, it will become very thick and heavy, sometimes five or six inches thick and a yard and a quarter long. One winter I edged with it a box at a north window that received no sun except from an east window, where the sun struck across a short time in the morning; it grew just as finely.

The next winter I tried Sweet Alyssum with equal success, and it was loaded with blossoms, one time taking off ninety heads of bloom, and scarcely missing them. There were four plants across a box three feet in length. The heads of flowers lay against the window, but at night I slipped newspapers between. This was near Port Henry, on Lake Champlain. MRS. G. A. M.

AILANTHUS FOR TIMBER.

A correspondent of Spokane Falls, Washington Territory, inquires about the Ailanthus for timber culture. How well this tree would be adapted to the region of the inquirer is probably not known. It has been tried in California, Oregon and Utah, but we are not apprised of the result. ROBERT DOUGLAS, of Illinois, who is one of the best authorities on timber trees in the country, only recommends its employment south of 40° North latitude, but as the climates in the same latitudes on the western coast are milder than this side of the mountains, the tree may be quite hardy in Washington Territory. It does well on the dry lands of Kansas. It is a rapid growing tree, and eventually attains a large size. The wood is said to take a fine satiny polish, and to be valuable in carriage building and joinery. Its durability for posts and railroad ties is not yet quite satisfactorily tested, though the general opinion is that it is unsuited for such purposes. It is easily raised from seed, which should be sowed thin in drills and covered quite lightly.

PRUNING VINES.

GEORGE M. HIGH, of Middle Bass Island, Lake Erie, says that in mild winters he can see but little difference in the crop from vines pruned in autumn or early spring; but after a severe winter the former produces three times more than the latter.



OUR YOUNG PEOPLE.

"ANOTHER MAN'S TOOL."

IN TWO CHAPTERS.—CHAPTER I.

"Hallo, here's what you want," exclaimed Mr. Radnor, entering one of his long greenhouses with the morning paper and handing it to young Lewis Austin, with a forefinger placed as a pointer.

The latter glanced over an advertisement calling for an expert in handling Fuchsias, who could insure the forcing into bloom of a very large stock for the early spring market.

"There's your chance," continued Mr. Radnor, as Lewis looked up inquiringly.

"I've said nothing about wanting a chance," he answered, "not knowing you wished to be rid of me."

"Tut, tut, that's not the idea. I thought you were anxious for promotion and larger wages on account of your mother and sister."

"I am, indeed, for, as I told you at my father's death, the sum which he had slowly saved up for the surgical operation which is to enable my sister to walk, all went toward paying the doctor and undertaker. When I look at her sweet, patient face, Mr. Radnor, it nearly sets me wild to think of the time that must elapse before I can make up the one hundred dollars required. We have to live, meantime, and the savings are small. As for this advertisement, I don't see how you think it can benefit me, when you know I came to you a green hand, and have had less experience with Fuchsias than with almost any other class of plants."

"Yes, I know; but I propose to give you a training, which shall be short and sharp, to enable you to accept this chance. Mr. Kemp can afford to pay you well, for, knowing nothing of the business, he is obliged to depend upon hired skill; besides, Fuchsias are now in the height of their popularity, and there will be a great run on them next spring. That is why I have so large a stock myself, too large, in fact, with so much competition near by. But I see there, a good opening for you, and would like to help

you to the salary it will command, for your sister's sake as well as for your own."

"You are certainly very kind," answered Lewis, "but I could not assume the responsibility of such a position, lest Mr. Kemp be disappointed in his spring sales."

"Don't be foolish. You seem to forget that I am to show you exactly how to manage the plants; and your readiness to learn makes me safe in writing you a letter of recommendation at once, so that you can go immediately and secure the situation in advance of other applicants."

Now, Lewis Austin was straight forward and honorable to the core, and Mr. Radnor's talk impressed him unpleasantly. He had thought that his faithful work had made him necessary to the man, and, now, why this sudden proposition to transfer him? Could it be that he was really so interested in himself and sister? Perhaps so; but still he hesitated.

"Mr. Radnor," said he, "I do not like the idea of assuming to have knowledge I do not yet possess."

"Nonsense! Have done with such hair-splitting. If you delay now you will lose the place. But perhaps I am mistaken, after all, in the degree of anxiety you feel for your sister's helplessness. So we'll drop the subject."

"O, no, you could not over-rate that."

"Well, then, get yourself ready while I write the letter."

Lewis was now convinced that his employer wished to get rid of him, and to be thrown out of work then was something to be dreaded. So, ten minutes later his mother was both surprised and puzzled at his sudden appearance and his evasive answers. Knowing she had many anxieties to harass her, he had determined to say nothing about this new feature of disturbance until he knew something more definite himself. A glance at his sister, whom he almost worshipped in her pa-

thetic gentleness, only confirmed him in the feeling that no time must be lost in accumulating the coveted sum.

But when he returned to Mr. Radnor, it was still with misgivings; and upon receiving the letter that was to send him seeking a position of responsibility that he had not yet the knowledge to fill, he felt almost like a culprit—a new sensation to him, and one that gave him an instant feeling of contempt for himself, and only for his sister he would have torn up the letter and offered to resign his situation.

Mr. Radnor, not choosing to notice his dejection, hastened to say, "You may not be able to get the position, you know, but it is worth a trial. You'll only need to present this letter, and the thing will soon be settled, one way or the other."

Lewis noticed that the letter was sealed, but without considering that it is a breach of business etiquette to seal a letter of introduction or recommendation, he pocketed it, and started off with mingled feelings of desire and protest. Mr. Kemp lived in the city suburbs, but a mile distant, and Lewis was soon in his presence. When he had read the letter he turned to the very young-looking man and shook him by the hand with hearty friendliness, saying:

"You bring a high recommendation from Mr. Radnor. He, being a 'professional,' ought to know your qualifications thoroughly; so, I don't see why I need look any farther, if we can arrange satisfactorily as to terms."

"I always aim," said Lewis, "to do my work well, and it generally speaks for itself."

"Yes, yes; our kind of work always report our skill or the lack of it. We may sand it, as they do sugar, and water it, as they do vinegar, and if we don't overdo it there will be a good showing. But when it comes to throwing shoddy goods on the market, as some manufacturers do, we are caught every time. The bloom, or the fruit, as the case may be, will proclaim the fraud to the eyes of all beholders. By the way, it seems curious, when we come to consider, how these inanimate creations often bear undesirable witness to the dishonesty of man—holding up to the light of heaven the very best they have to give, but which, nevertheless, silently testifies to the sun and the showers, to the moon

and the stars, and to the embittered heart of the purchaser that he has been defrauded.

"But enough of this, now. You see my admiration for this business has led me to adopt it in middle life. Now, what salary per month will you consider a fair compensation?"

Lewis answered according to Mr. Radnor's instructions, and Mr. Kemp, seeming to think the terms reasonable, the engagement was soon concluded, and they parted, each well pleased with the other.

Once more alone, Lewis found his mind in a tumult. When he thought how soon his sister could now have the benefit of surgical skill, he was exultant; but when again he recalled the conditions by which he had secured such good luck, he was remorseful and despondent. He tried to define the quality of the wrong he had committed, and finally reduced it to "a *harmless, temporary deception*, which had not been confirmed by any word of his own, but only *implied* by his silence.

Thus he reasoned with himself, hoping to soothe the turbulent sense of outraged honor and manliness within him, and to regain his old feeling of self respect. "Anyway," he thought, "Mr. Radnor is the one chiefly to blame for first proposing, and then insisting on the arrangement. And now that it's made, I am resolved that Mr. Kemp shall be the gainer by my services in every possible way."

Upon returning to the greenhouses, Mr. Radnor looked up with a sharp, expectant, "Well?"

"I have engaged to go to Mr. Kemp within a week," said Lewis, gravely.

"All right," Mr. Radnor returned. "I will give you the promised instruction in time. Fuchsias require rather peculiar handling."

Four months had now passed by since Lewis had assumed his new duties, and one bright April morning, when Mr. Radnor was busy in his packing department, he felt a twinge of disturbance upon seeing Mr. Kemp come in, with a "Good morning, sir. I have come," said he, "to look over your stock of Fuchsias, and see how they compare with mine." Mr. Radnor wished himself elsewhere, but blandly invited his caller to go

through his Fuchsia house. The latter made good use of his eyes, and finally said:

"Compared with your plants, Mr. Radnor, mine are too stocky, have been cut back too much, and now have little or no bloom; while yours are heavy with blossoms. Your stock is in fine condition, and must prove very attractive to purchasers."

"Yes, it makes a fair showing," Mr. Radnor assented; and then, knowing he could no longer evade the subject, he continued: "I met Lewis, last evening; he tells me you are not getting on very well."

"Does he? the sneak!" Then, with flashing eyes fixed on Radnor's face, he hissed through his teeth. "Can there be but one reason—a devilish one—for your complicity with young Austin in manipulating my plants so that the stock shall be left on my hands?"

Mr. Radnor had long been ready for such a crisis, should it come, and retorted sharply, "Hold on! I can make you smart for such language. You'd better keep cool, and look at the matter dispassionately."

"Bosh! You sent Austin to me with a high recommendation for that very job."

"No, sir. Read that letter again. I wrote that he had served me faithfully, and that his work had turned out well, which was true. I said nothing about Fuchsias. If he was planning to leave me, it was not my business to question him. But if he wanted a recommenda-

tion to help him on with a stranger, I could certainly give him one."

"But he says you instructed him how to handle my plants."

"Mr. Kemp, does that sound reasonable? This stock has been developed, as you see, since he left here, and he only came to me a year ago now, when last season's stock was already in this shape. The fact is, the fellow is half beside himself with anxiety to earn money for an invalid sister, and I was sorry for him and willing to help him what I could."

"At my expense," thought Mr. Kemp, and took his departure. He soon looked up Mr. Radnor's letter, and found it, sure enough, non-committal, so cautiously worded had it been. Then, seeking Lewis, he promptly dismissed him from his service, with tone and manner as grieved as they were severe.

Poor Lewis, who was distressed beyond all words by the failure of his work, had been about to resign and return the wages already received, as the only reparation he could make. And now he cried out:

"O, sir, do not think me worse than I am; let me explain, before I —."

"Not another word! I have seen Radnor's Fuchsias to-day, and realize fully what I have lost through you. Whatever blame may belong to Radnor, you well knew when you came to me that you were ignorant of this particular business; and that alone is enough to condemn you,—go."

MARIA BARRETT BUTLER.

A WINTER LULLABY.

The valley has gone to sleep;
The robins' nests are still.
And the Maple branches bend and weep
Over the leafless hill,
Till the pitying sky looks down
And whispers to the snow,
"Let us cover the hills so bare and brown,
Where the flowers used to grow—"
And she croons a lullaby
Through the hush of the storm—
"Sleep, sleep,
In your cradle deep,
I will keep you warm."
The valley is going to wake;
The oriole will sing,
And the Maple buds begin to break
Into the leaves of spring;
For the dreaming vale will hear
Another lullaby,
The zephyrs will whisper it into her ear
Out of the heart of the sky—
Another cradle song

Tuned to the harp of the stream

"Wake! wake!
For the robin's sake,
And tell the sky your dream."

J. K. M., in *Boston Journal*.

DAFFY DIL AND JONNY QUIL.

Said Johnny Quil to Daffy Dil,
His pretty country cousin,
"Now is our chance to have a dance,
Your sisters, full a dozen,
Are here in golden cap and frill;
What say you, cousin Daffy Dil?"

Said Daffy Dil to Jonny Quil,
"To dance would give me pleasure,
But then, you know, the Wind must blow,
To beat our time and measure.
Young April Wind will be here soon,
And he will whistle us a tune."

UNDER BLUE SKIES.

PANSY—AN ALLEGORY.

In a quiet dell there dwelt a little flower of exquisite beauty and fragrance. So modest was this little floweret that it sought the most retired spot of the glade for its home, blooming in its richest colors beneath the shadow of some tall leaf. But it was not long to bloom thus. One day, an angel in a mission of love to this earth, passed its hiding place, and brushing aside the Plantain leaf with her wing, there discovered the flower.

"Ah!" she cried, as she bent over to inhale its fragrance, "thou art lovely, indeed, too lovely to dwell here in solitude alone. I will breathe upon thee and thou shalt have an angel's face. Thou shalt go forth and bloom in every land, and carry with thee sweet thoughts of love and of heaven. Thou shalt grow in beauty, the splendor of thy varied dress shall be a marvel and a joy to all that behold thee."

Sealing her promise with a kiss, the angel departed, leaving the imprint of her fair face upon the floweret.

Thus it is that the Pansy has become a herald of joy throughout the land, and even to all civilized people everywhere. In the garden of the quiet country home she has

her place and is tended with loving care. In the crowded city mart you see her beaming face, and she smiles so sweetly that not one in that passing throng can resist her. Even the thoughtful business man, though in the pursuit of his plans,



will stop to admire, and in a moment you will see him pass on, carrying the beautiful plant with him, while thoughts of a dear friend or loved ones at home, drive business from his mind and smoothe the line of care from his brow. Ah, is there another flower so universally loved!

I. L. M.

EDITOR'S MISCELLANY.

BOOK OF PLANT DESCRIPTIONS.

A new and revised edition of this book has recently been issued. It is intended for botanical students, the use of it training them to record systematically the facts in all plant analyses. It is a most excellent system for students of botany to follow, and by which they must become careful and accurate observers. It is published at a low price by the author, George G. Groff, A. M., M. D., of Lewisburgh, Pa.

DRUGS AND MEDICINES OF NORTH AMERICA.

The second number of the second volume of this work was received some weeks since, and number three is just at hand. In the first of these the study

of the members of the Magnolia family is concluded, *Asimina triloba* in its botanical, chemical and pharmaceutical aspects is considered, and the examination of species of *Lobelia* commenced; *Lobelia* is continued through the whole of number three, making an exhaustive study of it. A work worthy of the attention of physicians, pharmacists and botanists.

The poem by Celia Thaxter, on another page, is one of her characteristic writings—full of allusions to natural scenes and objects. It is taken from the volume of hers lately issued by Houghton, Mifflin & Co., of Boston, entitled, *The Cruise of the Mystery, and other Poems*. A lover of poetry and nature cannot fail to be charmed by her song.